

# A TASTE OF THE FUTURE

## Service manual



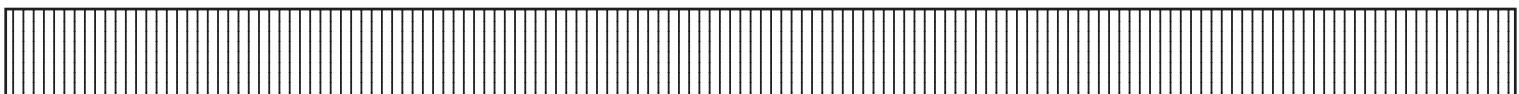
# COFFEE QUEEN

## Residence

Your retail dealer

S / GB

Rev. 071115



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We congratulate to your choice of a Coffee Queen Freshbrew machine.

**Please read this manual before you take the machine into operation for the first time.**

The manual contains important instructions for a safe and proper use of the machine.

Always keep this manual within reach for the user!

#### **Coffee Queen Residence**

- Making coffee cup by cup, jug by jug
- Jug facility with key switch
- 12 choices of drinks
- 4 ingredients canisters
- Brewing mechanism with coffee filter
- Electronically temperature controlled
  
- Adjustable coffee strength
- Illuminated cup while brewing
- Clock functions (Built-in)
- Base cabinet with storage and large waste bin (optional)
- Manufactured in stainless steel

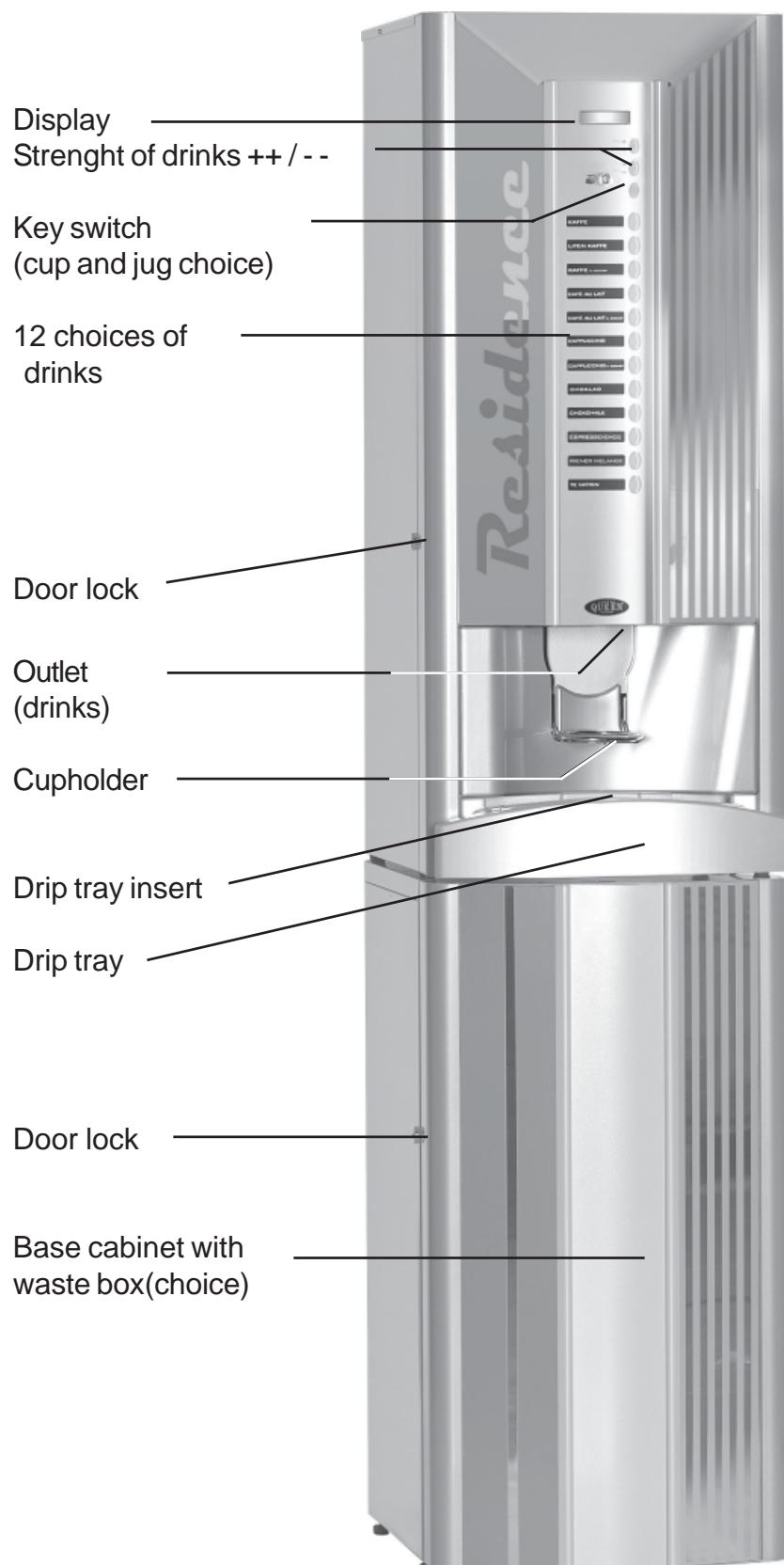
#### **Facts:**

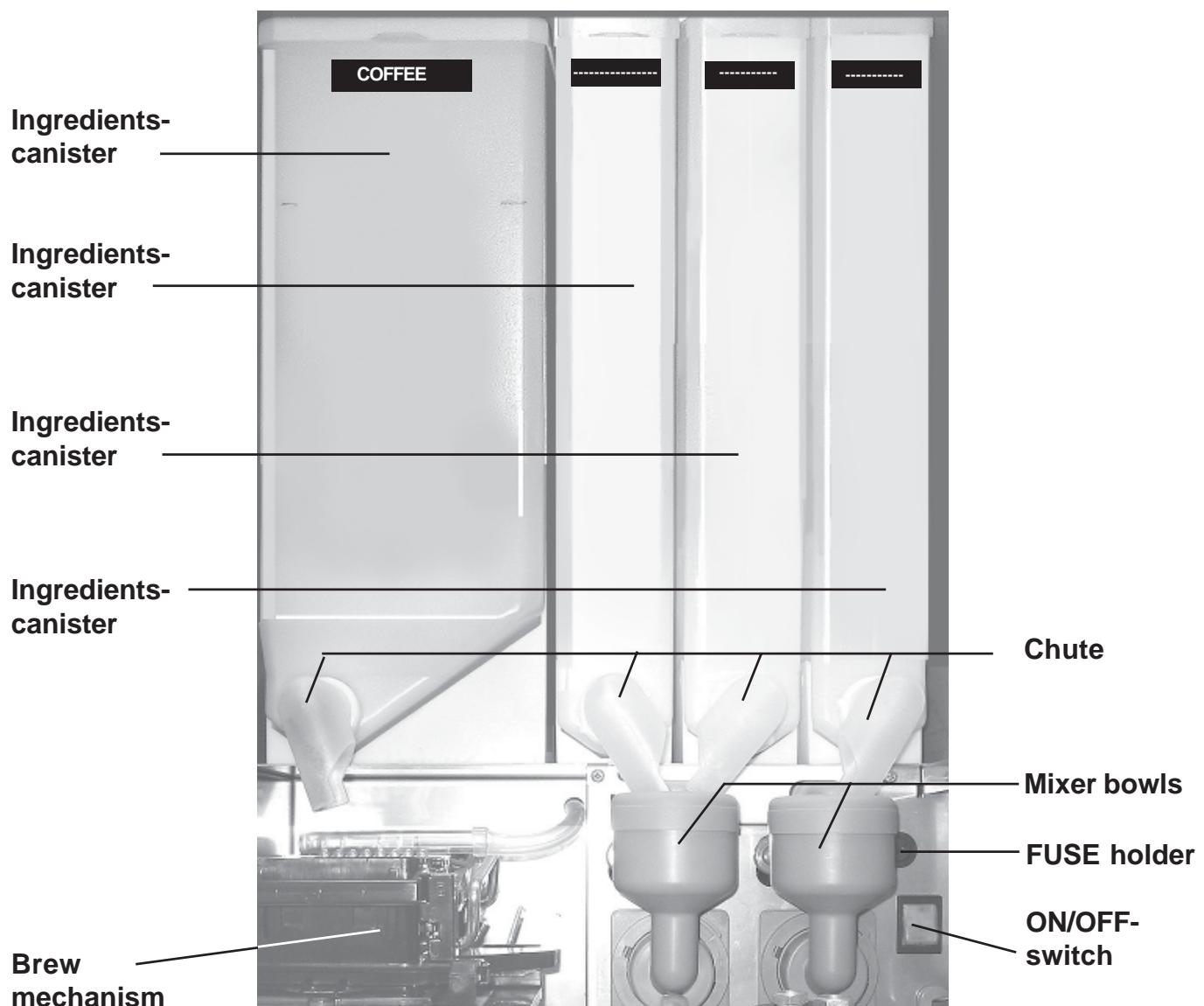
Height	995 mm (1795mm with base cabinet)
Width	420 mm
Depth	580 mm
Weight	<b>41kg (+ base cabinet 25kg) packing 5kg</b>
Tankage	2.4 litre
Electricity	230V/2200W
Water connection	½" outside thread

#### **Capacity:**

Approx cups of coffee	350 a (per) filling
Ingredients canisters	4 st.(variable contents)

User manual only valid these model.





Detail;	Ingredients;	Width;	Height;	Capacity/cups	Volume/litre;	Amount/unit
<b>Canister;</b>	coffee	160	400	3,1kg / 300	9,3	1
<b>Canister;</b>	chocolate	67	400	2,7kg / 140	3,5	1
<b>Canister;</b>	topping	67	400	1,9kg / 210	3,5	1
<b>Canister;</b>	sugar	67	400	3,3kg /	3,5	1

1. Place the brewer on a flat level and waterproof surface.



Connect the electrical plug to a separate grounded wall socket

**Grounded wall socket  
230V 10A**



**OBSERVE!**

**Make sure there is a space behind the machine for free flow of air. ( minimum 10cm ).**

2. Connect attached water tube to cold water with an R 1/2".  
Make sure that the water hose not are kinked anywhere when machine is pushed into place.

Please flush the water tube before connecting to machine, this to avoid any particles to damage the inlet valve.

- 3.. Open the water inlet.

4. Turn on the switch inside the door.

Water is been filled into the tank automatically with 2,4 litres of water. The heating will not start before the water level reaches the level sensor.

Set temperature is approx 97°C.



**ON / OFF  
Switch**

5. Close door.

6.

**6. Fill canisters with ingredients.**

Take out  
(this to avoid unnecessary spillage in the machine)  
ingredient canisters and fill them with ingredients.

COFFEE

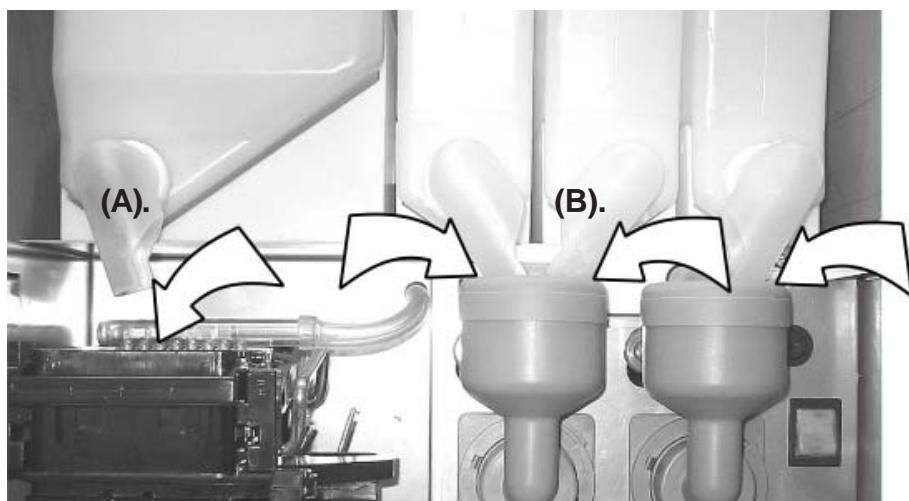
CHOCOLATE

SUGAR

TOPPING

**7. When placing the ingredients canisters:**

Make sure that the outlet pipes on the ingredient canisters are touching the steam traps (B) and that the coffee powder will fall into the centre of the brew mechanism (A).

**8. When the water is heated up to right temperature**

The message "**please wait**" will disappear and  
Machine **is ready to use**.

**"please wait"**



## Brewing of coffee. Chocolate etc.

1. Place a cup in the centre of the cup holder.



2. The strength has a standard setting, if you wish to increase or decrease it, do as follows:  
if not continue to point 3.

### Stronger drink;

Increase by pushing + or ++ for 5% or 10%

### Weaker drink

Decrease by pushing - or -- for 5% or 10%  
(the indication lamp will go up or down  
depending of choice).

3. Choose drink by pushing on the button to the right of each menu (Indication lamp will start blinking)  
The display will show;  
"Please wait", and the light on the cup will light up.

4. Wait until the light on cup and the message "Please wait" has been turned off before you take your cup.

5. Enjoy your drink.



### Brewing of jug.

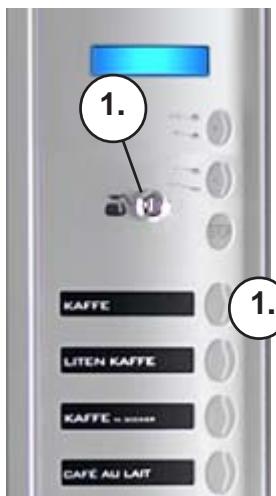
1. Place a jug in the centre of drip tray.



2. Turn on the key with jug symbol clockwise.
3. 6 cups of brewing is standard settings,  
Change amount of cups by pushing + or - button.  
Optional up to 12 cups or down to 1 cup brewing.
4. Push the button to the right of menu "Coffee"  
(The indication lamp starts blinking)
5. Wait until the light and message "Please wait" has been turned off before you take out the jug.
6. Serve a jug with good coffee.

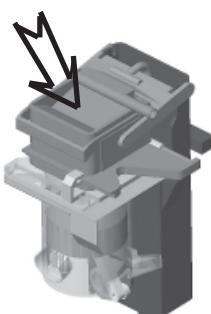
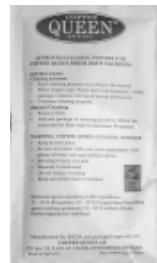
**Automatic cleaning of brew mechanism, mixing bowl:****Shall been done every week.**

The brewmechanism can easily be cleaned with the key switch in "cup" (normal) position.



1. Turn the key slowly ninety degress and back again.  
Push button for drink 1 for 6 seconds.
2. After 4 seconds the signal will go faster.
3. After 6 seconds **The display shows;** "Open door"  
"load detergent".
4. Fill 25gr detergent (one portion bag) in to the brew mechanism. (Detergent will be supplied from your dealer)
5. **The display shows;** "Close door"
6. **The display shows;** "When ready press key"  
Place a jug into the drip tray and push button for drink 1
7. **The display shows;** "Cleaning mixer" (2....)
8. **The display shows;** "Rinsing coffee" "Soak time:"  
The machine start to count down from 300 seconds.
9. **The display shows.** "Brewer cycle" the machine is counting down.

A

**Fig.B**

To stop cleaning process: push "Stop" button.  
The brew mechanism will go back to start position.  
NOTE! Dont stop the process when detergent has been loaded.  
Then the cleaning must be finished.

**IMPORTANT! Cleaning of brew house.**

After the automatic cleaning program is finished. Clean brew house! This must be done, to make sure that you will remove residual detergents and coffee remains!

**Dismantling and cleaning/washing brew house:**

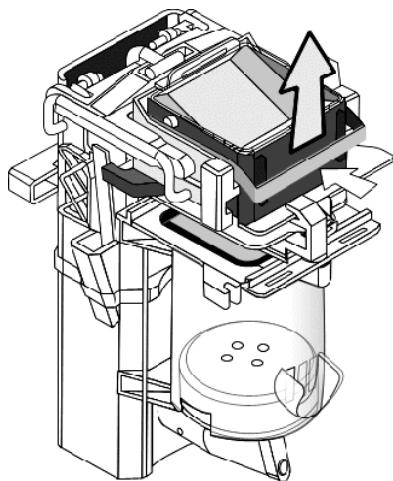
Do as follow in paragraph 10- 19.



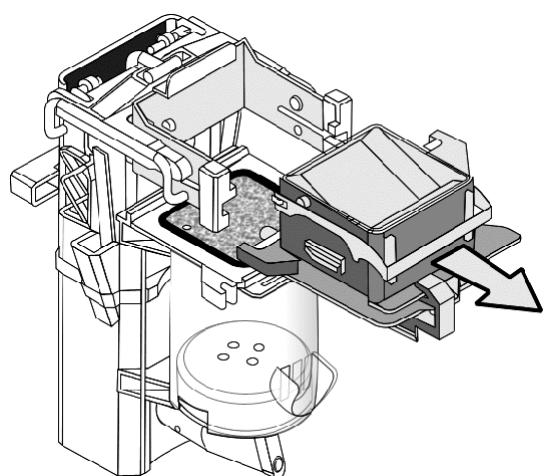
10. **Push "+" button for 6 seconds**
11. The display shows: "Change paper/Rotate" "Push E/ +"
12. Push "E" button.
13. The display shows; "Preparing paperload".
14. The machine will rotate in position.
15. The display shows,"Change paper"
16. **Open door, dismantle**, clean and reassemble brew house.  
page 11. **If machine not will go back in start position.**
17. Close door. **Restart machine.**
18. **Machine is ready to use again.**
19. Take out a cup of coffee and pour out just to make sure that there is nothing left of detergent.

**Dismantling and cleaning/washing brew house:****Dismantle brew house:**

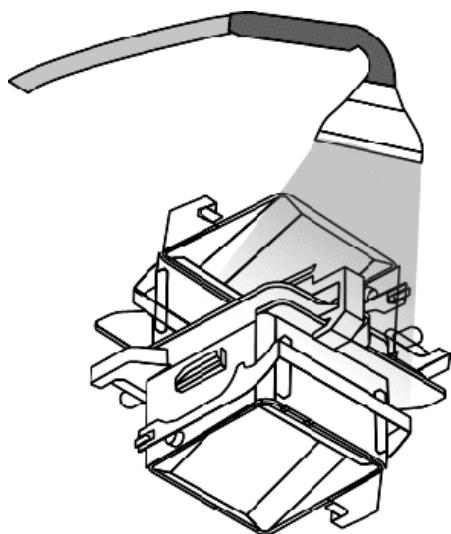
1.



2.

**3. Flush brew house!**

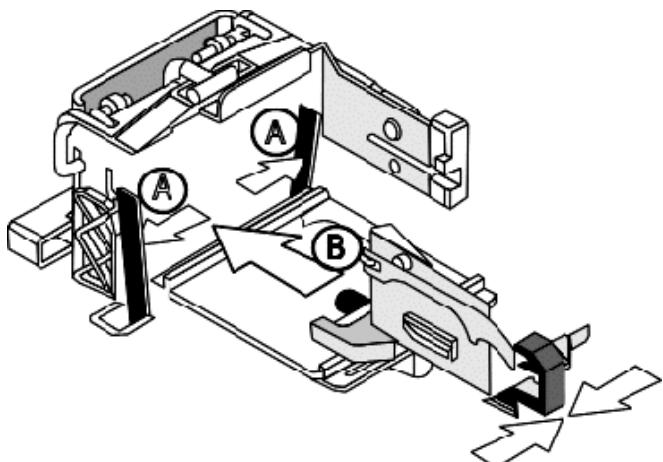
To remove detergent and coffee remnants.



4.

**Reassemble brew house.**

NOTE! When reassemble brew house make sure that (B) wiper are between (A) arms.



**Weekly cleaning! Automatic cleaning of mixing bowl 2 or 3.**

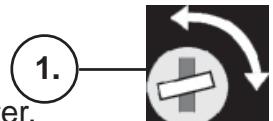
If you only wish to clean the mixer bowl and whipper house; Follow these instructions:



The mixer bowls can easily be cleaned with the key switch in "cup" (normal) position.

**Automatik cleaning of mixer bowl No:2**

1. **Place a jug in the drip tray.**
2. Turn the key (1) slowly ninety degrees and back again.  
**Push button (3) for 6 seconds.**
3. After 4 seconds the signal will go faster.
4. After 6 seconds the mixer bowl and the whipper house no.2 starts to be cleaned in 5 seconds.  
**The display shows:** "Cleaning 2".

**Automatik cleaning of mixer bowl No:3**

1. **Place a jug in the drip tray.**
2. Turn the key slowly ninety degrees and back again.  
**Push button (4) for 6 seconds.**
3. After 4 seconds the signal will go faster.
4. After 6 seconds the mixer bowl and the whipper house no.3 starts to be cleaned in 5 seconds.  
**The display shows:** "Cleaning 3".



**By cleaning means that water is flushed and whipper motor rotates.**

**Automatic cleaning of In/Outlet valves:**

The In/Outlet valves can easily be cleaned with the key switch in "cup" (normal) position.



1. Place a jug in the drip tray.
2. Turn the key slowly ninety degrees and back again. **Push button "E" and "→" at the same time for 6 seconds. Keep buttons down.**
3. All In/Outlet valves will now start to open and close with 2 pulses/second in 10 seconds or so long you pushed the buttons.
4. The display shows: "Cleaning valves".
5. Push "E" button for making a brew cycle and to rinse system from remains and lime deposit.



**By cleaning is meant that valves "knocks" away eventual scale and other particles which has been attached in the cylinders and that they are flushed away with the water.**

**Rotate brew mechanism without water or ingredients:**

The brew mechanism can be rotated without water and ingredients with the key switch in "cup" (normal) position.

To be used when brew mechanism has been dismounted for washing and shall be remounted.

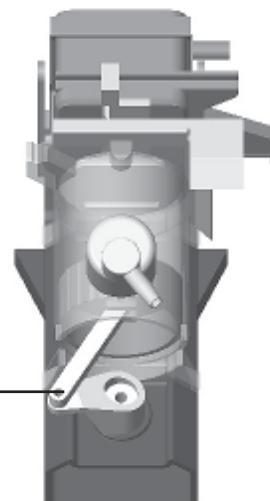


1. Push "+" button in 6 seconds.
2. After 4 seconds a signal will go faster.
3. The display shows: "Change paper/Rotate"  
"Push E/ +"
4. Push + button.
5. The display shows: "Rotate cycle without water".
6. Push "E" button.
7. The display shows: "Rotate"

The brew mechanism rotates one turn without water and ingredients and the mechanism falls into position if it has been dismounted.

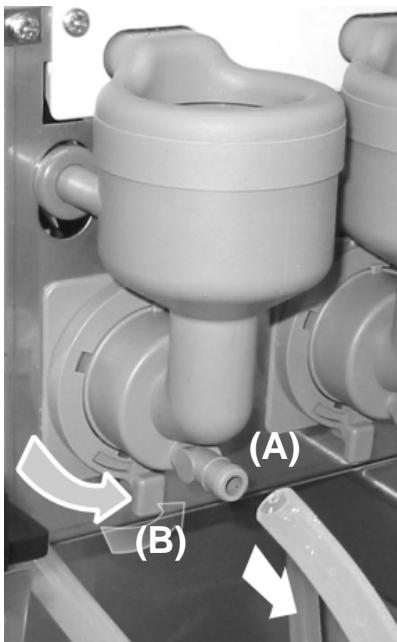
**Observe! The push rod shall be in position  
"8 o clock"  
If not take out again and repeat the procedure.**

Eight (8) o clock.

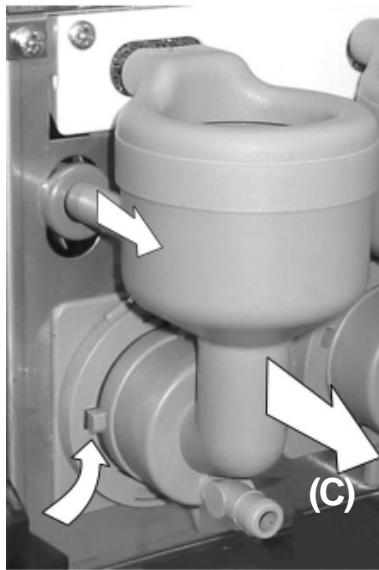


Dismantle : Mixer system

1.  
Loosen outlet hose (A) and turn lock knob (B) anti-clockwise.



2.  
Loosen mixer bowl. Pull apart (C).



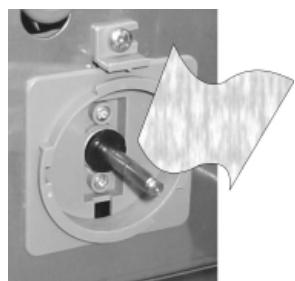
3.  
Loosen whipper (D) pull whipper straight out from the machine.



4.  
Turn lock knob anti-clockwise.(E) until it stops

**Cleaning**

5. Clean with a wet rag and drought drily.

**Wash these parts:****.6.**

A. Mixer bowl



B. Steam trap



C. Whipper



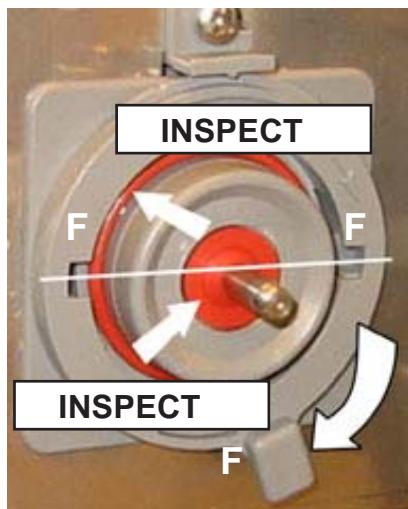
D. Assembly plate



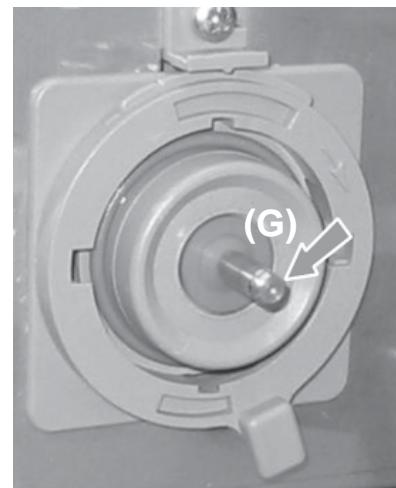
Make sure this parts are dry before use

**REASSEMBLE: Mixer system****7.**

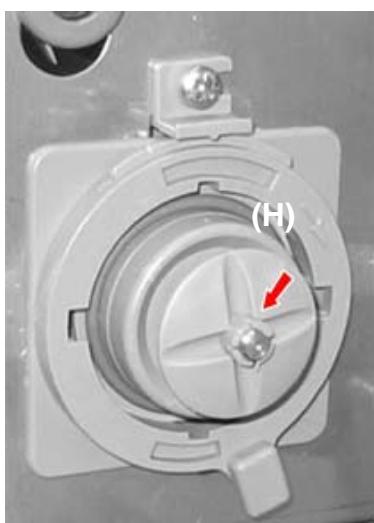
Reassemble the assembly plate by turning lock knob (F) clockwise. **INSPECT** gaskets.

**8.**

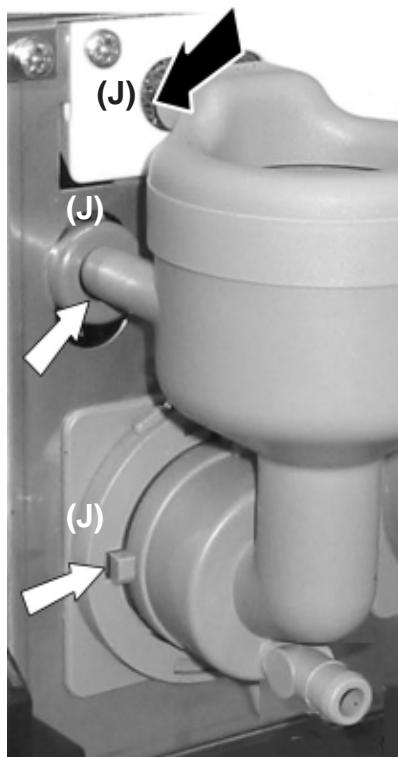
Make sure that the motor whippers plane side will be in accordance with the whippers plane side. see next (G) and picture (H).

**9.**

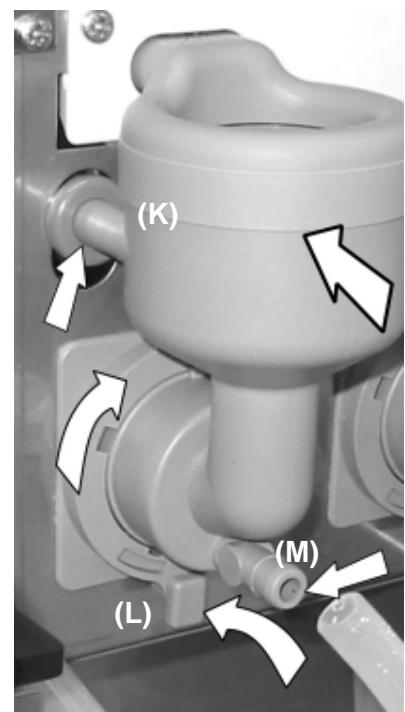
Assemble whipper , pull until you hear a clicking noise. (H).

**10.**

Assemble mixer bowl and steam trap (J) see picture.

**11.**

Easily push the mixer bowl towards, according to (K) and lock with lock knob (L).Connect outlet hose (M).  
**(NOTE!** make sure that all water hose are connected at right place



**Dismantling and cleaning coffee filter.****A tool for dismantling coffee filter, comes with machine.**

1. Push "+ button" for 6 seconds.
2. After 6 seconds the display shows; "Change paper/ Rotate" "Push E/+".
3. Push "E" button.
4. The display shows; "Preparing paperload".
5. The machine will rotate in position.
6. When the display shows, "Change paper" open the door and insert the extractor tool through the brewer spout all the way to the back of the cylinder, then slide it up until contact is made with the screen assembly. Push up on the rear of the screen assembly until it pops out of the cylinder.
7. Soak the screen assembly in a solution of 25gr. bleach in 3dl water for a maximum of 10 minutes.

Fig. 2.

Fig. 1.

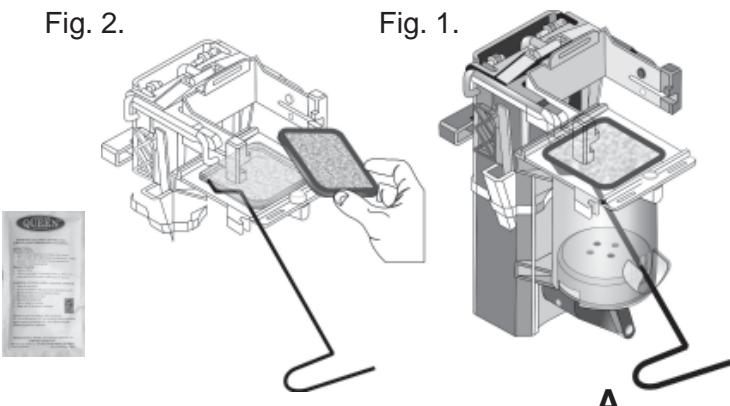
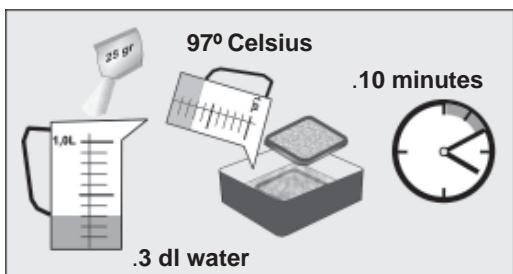


Fig. 3.



(Cleaning agent receives from your retail dealer)

8. Remount the screen assembly and close the door. Then the machine will return to start position and the machine is ready for use.  
If machine not will go back in start position. Restart machine!

**Prolonged contact** with bleach may damage the screen assembly. Once this is done, the screen should then be thoroughly rinsed with dish soap and warm water to remove any leftover residue

**Cleaning agent: (brew mechanism)**  
**Filter: (brew mechanism)**  
**Tool: (dismantling filter)**

**Coffee Queen article no 1104161**  
**Coffee Queen article no 47200213**  
**Coffee Queen article no 4720090**

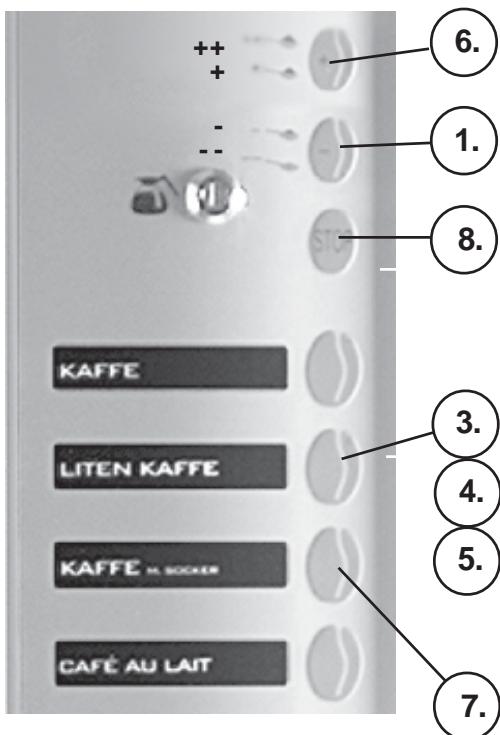
**Outside cleaning;**

**Outside cleaning; use a soft rag and liquid cleaning agent to prevent scratches.**



## Cup counter:

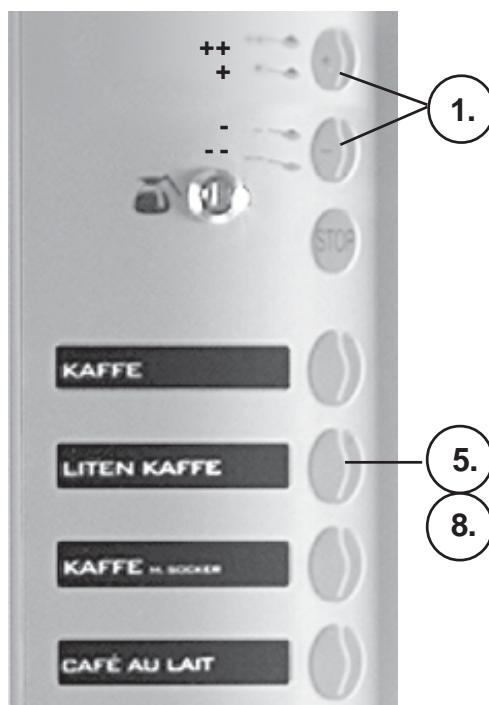
The machine has an in built cup counter which is available to see and reset with the key switch in "cup" (normal) position.



1. **Push “-” button for 6 seconds.**
2. After 4 seconds the signal will go faster..  
The display shows: **“Total xxx cups”**
3. Push “E” button.  
The display shows: **“Choice 1 free xxx cups”**
4. Push “E” button.  
The display shows **“Choice 1 coin xxx cups”**
5. Push “E” button.  
The display shows **“Choice 1 xxx cups in can”**
6. Push “+” button to reach to “choice 2” etc.
7. Push choice 3 to reset the counter.
8. Push “Stop” button to go back to user mode.

## Easy Access:

Volume and strength can be adjusted  $\pm 15\%$  with the key switch in "cup" (normal) position.

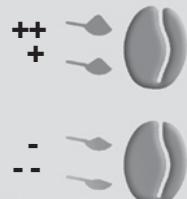


1. **Push "+" and "-" button at the same time.**
2. After 4 seconds the signal will go faster.
3. The display shows: "Easy access" "strength 1 100%"
4. Choose the drink you want to change by pushing "+" or "-" button.
5. Push "E" button.
6. The display shows: for example. Volume 4 and" Blinking 100%"
7. Change by pushing "+" or "-" button.
8. Push "E" button to confirm the change.  
Press "stop" to go back to user mode.

### The machine is equipped with following safety functions

1. Indication of door  
Door not closed  
The display shows; "Door open"
2. When machine is not in use:  
The valves are blocked.

**"Dörr öppen"**

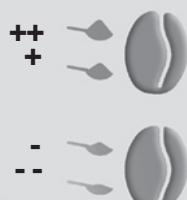


## 11. Failure messages.

### Failure messages which can mostly be corrected without any help from service company

1. The display shows; " Blocked" "Water level low"  
**Please check incoming water connection**  
**Turn off the machine with the main switch**  
**wait for 10 sec. and turn on again.**
2. The display shows normal: but no drink is coming.  
Possible cause of failure:  
Mechanical stop in the ingredients canisters or whipper.

**"Blockerat"**



## 12. Storage / Transport.

### Transport and no use in long time.

1. Turn off the switch, pull out the plug and close incoming water tube.
2. Empty the water tanks.
3. Keep machine free from frosts.

Long machine stoppages at temperatures as below 0°C (zero degrees celsius) can cause damage of the machine. Total emptying of water is recommended.

## 13. Installation of coin mec.

### Installation of coin mec for Freshbrew machines CQ.

**IMPORTANT: Installation must been done of an authorized technician.**

1. Assemble coin mec and connect to display-card, placed inside door.  
(see fig. 10).

( Connect with the enclosed cable (A). Make sure that power is off.



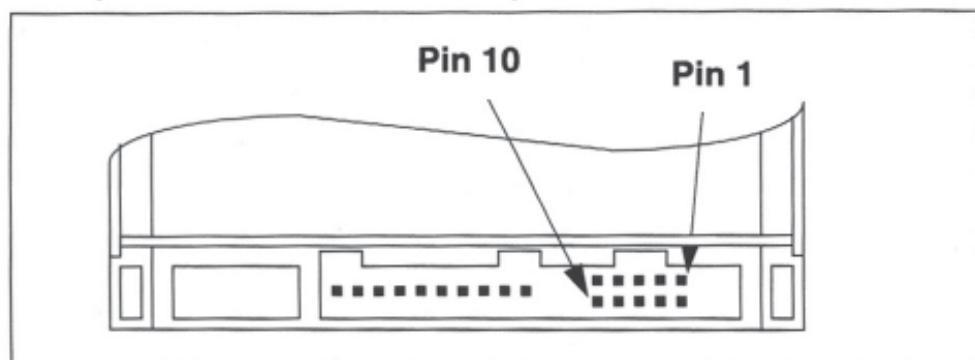
fig.(10)



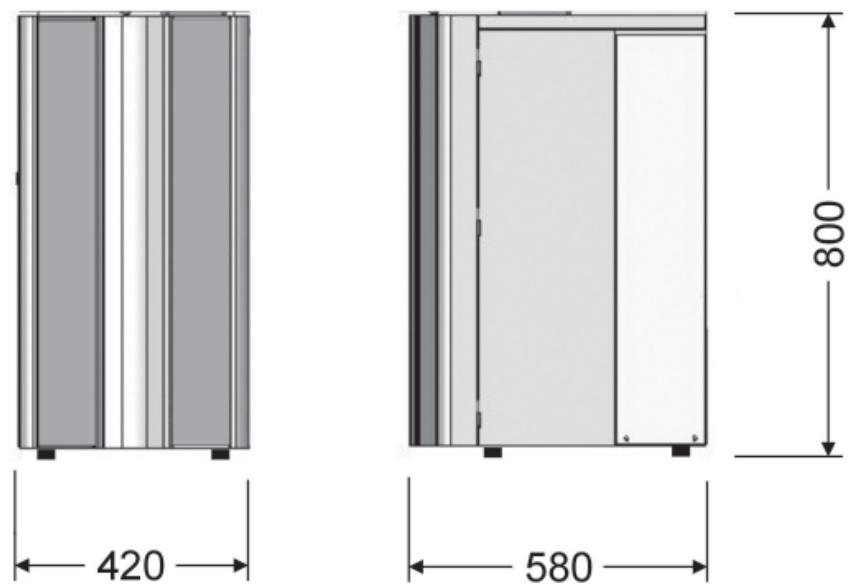
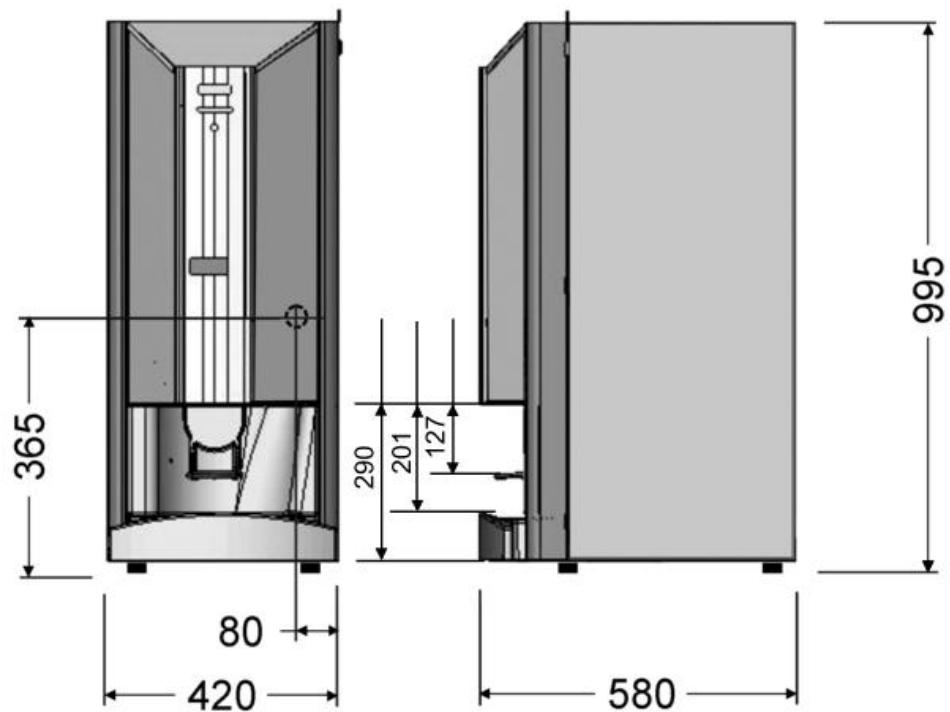
(A)

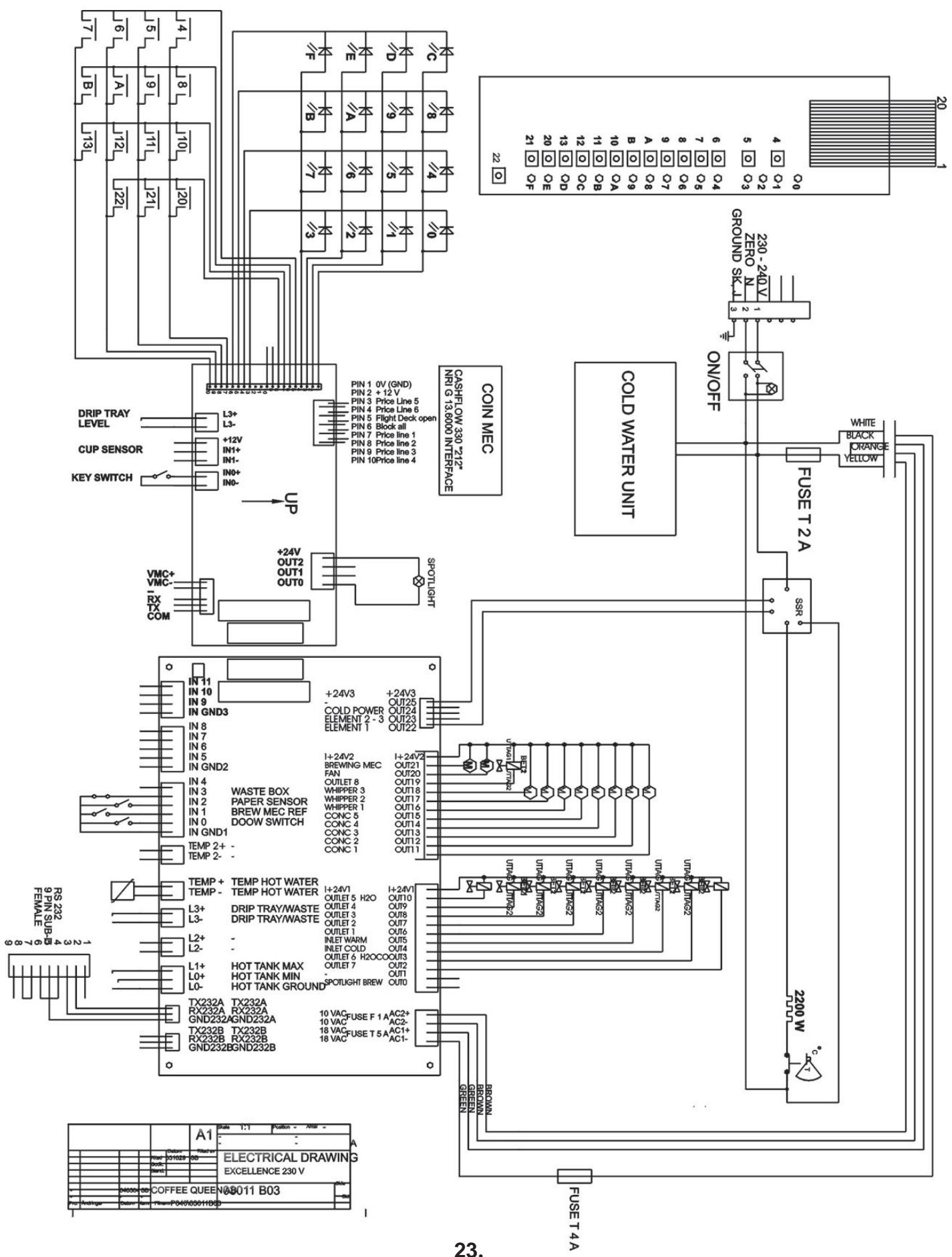


Connection



Connection placement; Version 212





## 16. Spare part list.

## Residence

Description;	Art. no.	Pos. no.	Amount/unit
			Re,
Level sensor complete	120548	1	1
Gasket (silicone) for sensor	150118-02	2	1
Heating element 2200W 230V	1601361	3	1
Water tank complete	7001305	4	1
Gasket, (lid water tank)	1206591	5	1
Motor gear 145 rpm, without axle	1604612	6	4
Motor axle for 1604612, 16mm	1604614	7	4
High limit controll, Bulba 73mm	220220	8	1
NTC thermistor	1604133	9	1
Rubber grommet , inlet for NTC thermistor	1605361	10	1
Valve outlet 24 V DC	120627-03	11	4
Membrane	1501191	11	1
Inlet (rubber), for valve	160537-03	12	4
Bulk head adaptor, mixing bowl	120498	13	2
Switch 2 pol (illumin.)	160801-04	14	1
Steam trap	120500	15	2
Mixing bowl	1204852	16	2
Whipper	1204842	17	2
Motor whipper 24V F	1604591	18	2
Motor whipper plate	1604592	19	2
Assembly plate	1204781	20	2
Outlet brew mech./angled	1201481	21	1
Outlet brew mech./extender	1201482	22	1
Outlet brew mech./adapter	1201483	23	1
O-ring 36,2 x 3,0	120650	24	1
O-ring 15,6 x 1,78	120652	25	1
Foam (filter) for dust trap	1201282	26	1
Dust trap, outlet	1105350	27	1
Slinger disc	120480	28	2
Grommet (for whipper pin)	120655-02	29	2
O-ring (red) for assembly plate mod. F	120638	30	2
Silicone hose outlet valv./Outlet 8x12 L=600	150501	31	1
Silicone hose inlet / water tank 8x12 L=530	150501	31	1
Silicone hose water tank / drain 8x12 L=1000	150501	31	1
Silicone hose water tank 8x12 L=320	150501	31	1
Silicone hose outlet valv./topp. 8x12 L=300	150501	31	1
Silicone hose outlet valv./choco 8x12 L=280	150501	31	1
Silicone hose outlet valv./brewm. 8x12 L=330	150501	31	1
Silicone hose mixer 1/Outlet 8x12 L=200	150501	31	1
Silicone hose mixer 2/Outlet 8x12 L=240	150501	31	1

**Note!      Silicone hose 150501 sales (by the metre (amer. meter)**

## 16. Spare part list.

## Residence

Description;	Art. no.	Pos. no.	Amount/unit
			RE,
Fan	1604171	32	1
Grid cover for fan	1604172	33	1
Valve inlet 2,5 l/min	1206371	34	1
Solid state	1604201	35	1
Electronic card CON 1200 ( <i>in use on machine until 0609</i> )	1604002	36	1
Electronic card Ver. II ( <i>in use on machine from 0610</i> )	1604102	36	1
Fuse 4 Ampere (slow 5x20)	1604381	37	1
Decal - fuse 5/1Amp. slow	1701983	38	1
Decal - fuse 4 Amp. slow	1701982	39	1
Brew engine unit compl. spare part	1201432	40	1
Brewer dock white	120144	41	1
Pin 3,5x36	1201453	42	1
Pin 2,0x36	1201454	43	1
Microswitch V5J (brew engine)	160829	44	1
Main supply cable 3x1mm <sup>2</sup>	160522	45	1
Main supply cable, Europa	160565	45	1
Inlet-plug and socket	160570	45	1
Fuse holder	1604351	46	2
Fuse 2 Amp. slow 5x20	1604382	47	1
Decal - fuse 2 Amp. slow	1701981	48	1
Connection block PA 80	160351	49	1
Gable (connection block) PA 80	160352	50	1
Transformer	5003111	51	1
Micro switch	160841	52	1
Waste box, top cabinet	1105356	53	1
Waste box, base cabinet	1105317	54	1
Waste funnel, top cabinet	1105357	55	1
Refuse sack	1704921	56	-
Brew mechanism, complete	7001137	57	1
Tool, dismantling of filter	4720090	58	1

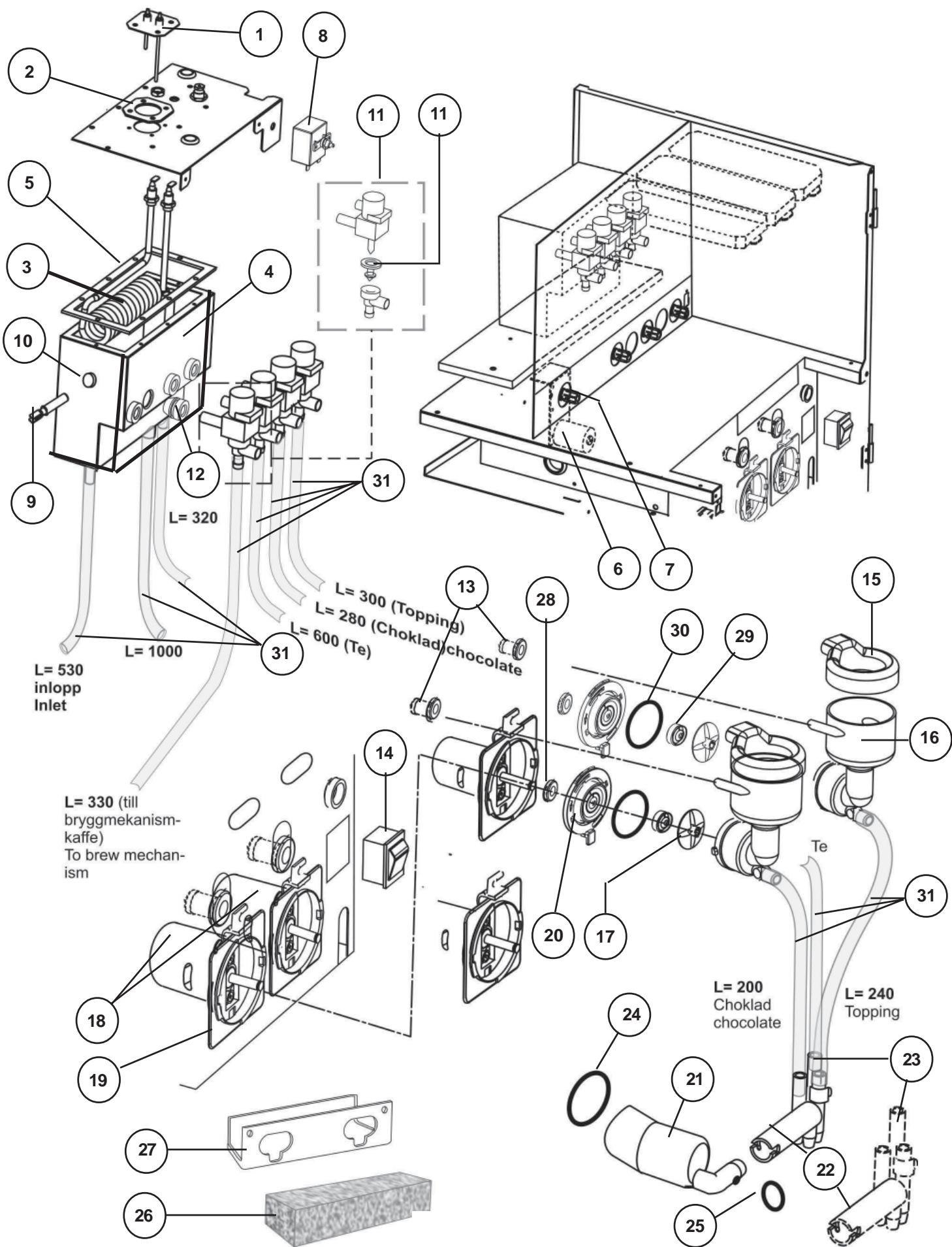
## 16. Spare part list.

Residence

Description;	Art. no.	Pos. no.	Amount/unit	
			Re,	
Ingredients canister B67 x H400	1205612	59	3	
Lid	1205671	60	3	
Ingredients canister B160 x H400 (coffee)	1205616	61	1	
Lid	1205675	62	1	
Cup holder	1102032	66	1	
Diode lamp complete	1104544	67	1	
Drip tray	1105351	68	1	
Drip tray insert	1102031	69	1	
Flat conductor cable	1606727	70	1	
Display board ( <i>in use on machine until 0609</i> )	1604007	71	1	
Display board Ver 1( <i>in use on machine from 0610</i> )	1604101	71	1	
Key-switch	1202551	72	1	
Membran switch	1603841	73	1	
Lock with clamp(door) Instant	120250	74	2	
Key, (door) Instant	120251	75	2	
Service key (tool)	180290-03	76	1	
Drip pan	1204611	77	1	
Foot, base cabinet	120316	78	4	
Foot, adjustable	1203202	79	4	

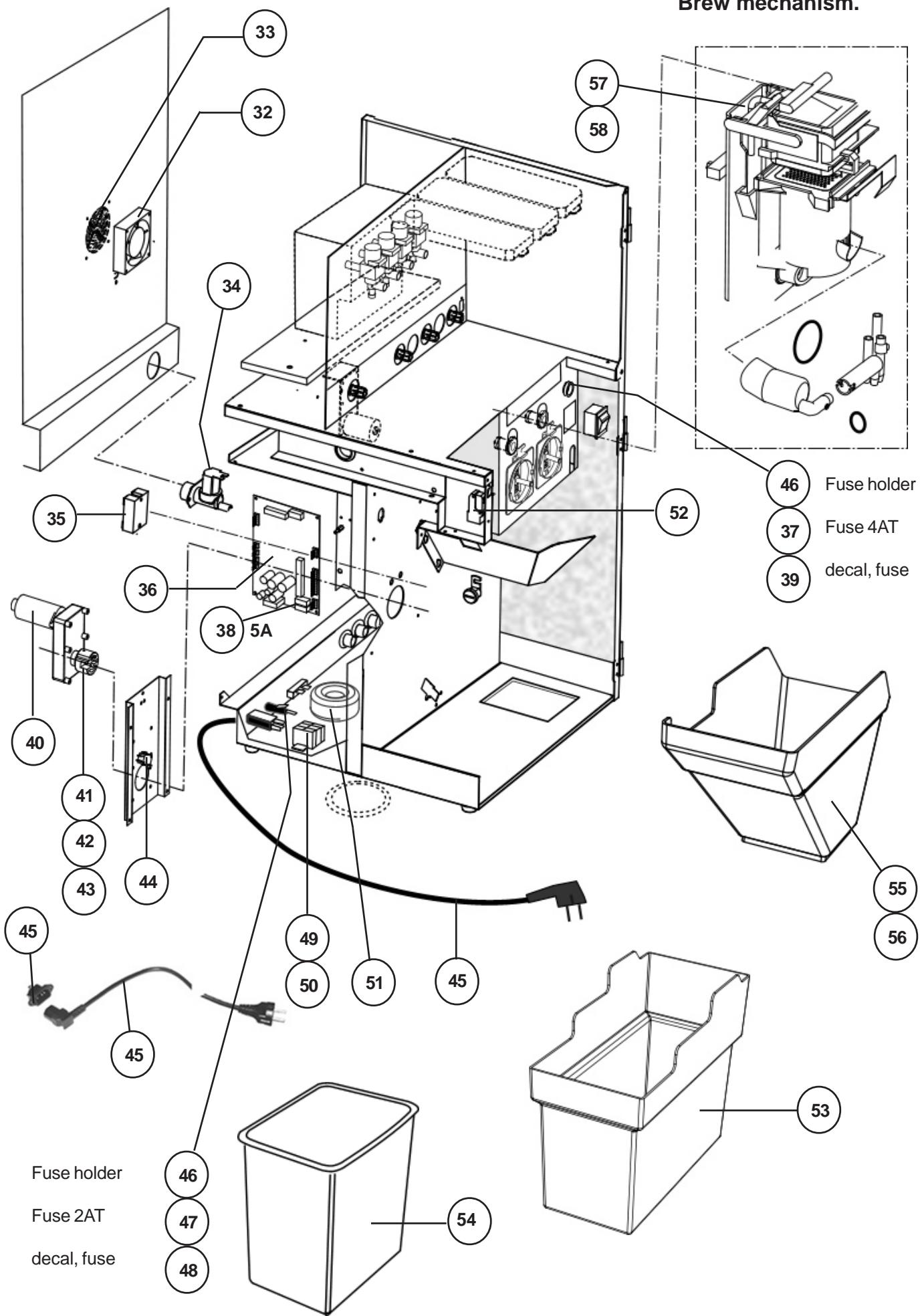
## 16. Spare parts list. Brew mechanism

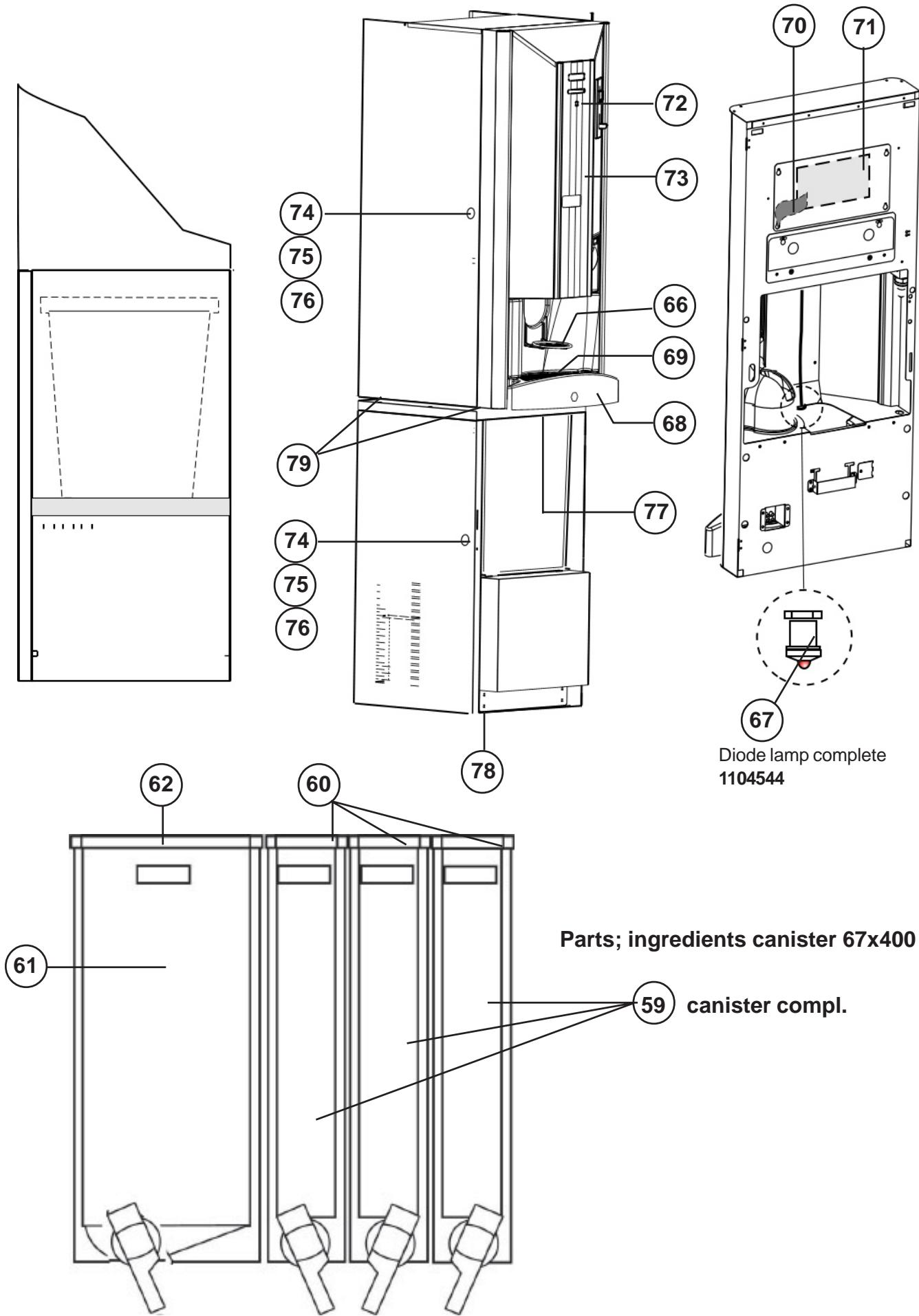
Description:	Article no.	Pos.no.	Amount / unit
Deflector, Cylinder	4720008	125	
Pin, Crank Arm	4720010	126	
O-ring Piston	4720012	127	
Rubber Ring, Piston	4720013	128	
Teflon Seal	4720014	129	
Plate, Top	4720015	130	
Screw, 8 x 1/2, Truss, AB, TAPP	4720016	131	
Cylinder	4720017	132	
Plug, Vent, Cylinder	4720018	133	
Screw, 4-40 x 1/4, Truss	4720019	134	
Screw, 8-32 x 1/2, Truss	4720020	135	
Assembly, Filter Screen, Poly, #44	47200213	136	
Seal, Brew Chamber	4720022	137	
Bar, Latch	4720023	138	
Carriage, Wiper	4720024	139	
Rod, Carriage, Wiper	4720025	140	
Retaining Ring, .250	4720026	141	
Wiper, Complete	4720027	142	
Brew Chamber	4720028	143	
Spring Clip, Latch Bar	4720029	144	
Housing, Vertical Rod	4720001	145	
Cam, Triple	4720002	146	
Unwipe Arm Assembly	4720003	147	
Spacer, Wipe Arm	4720004	148	
Spring, Wipe Arm	4720005	149	
Retaining Ring, TRU ARC	4720006	150	
Vevarm	4720007	151	
Plate, Ret., Cycle	4720030	152	
Plate, Ret., Support	4720031	153	
Latch, Block, LHS	4720032	154	
Latch, Block, RHS	4720033	155	
Retaining Ring	4720034	156	
Tube, Outlet, Water	4720035	157	
Wrap, Brew Chamber	4720036	158	
Shim 0,2	1303501	159	
Shim 0,5	1303502	159	
Spacer, Sil., 3/16 x .350 x 1.5	4720038	160	
Spring, H-Frame	4720039	161	
H-Frame	4720040	162	
Screw, 8-32 x 3/4, PAN	4720041	163	
Pin, Grooved, 3/16 x 1.25	4720046	164	
Wipe Arm, Assembly	4720048	165	
Vertical Rod, Welded	4720049	166	

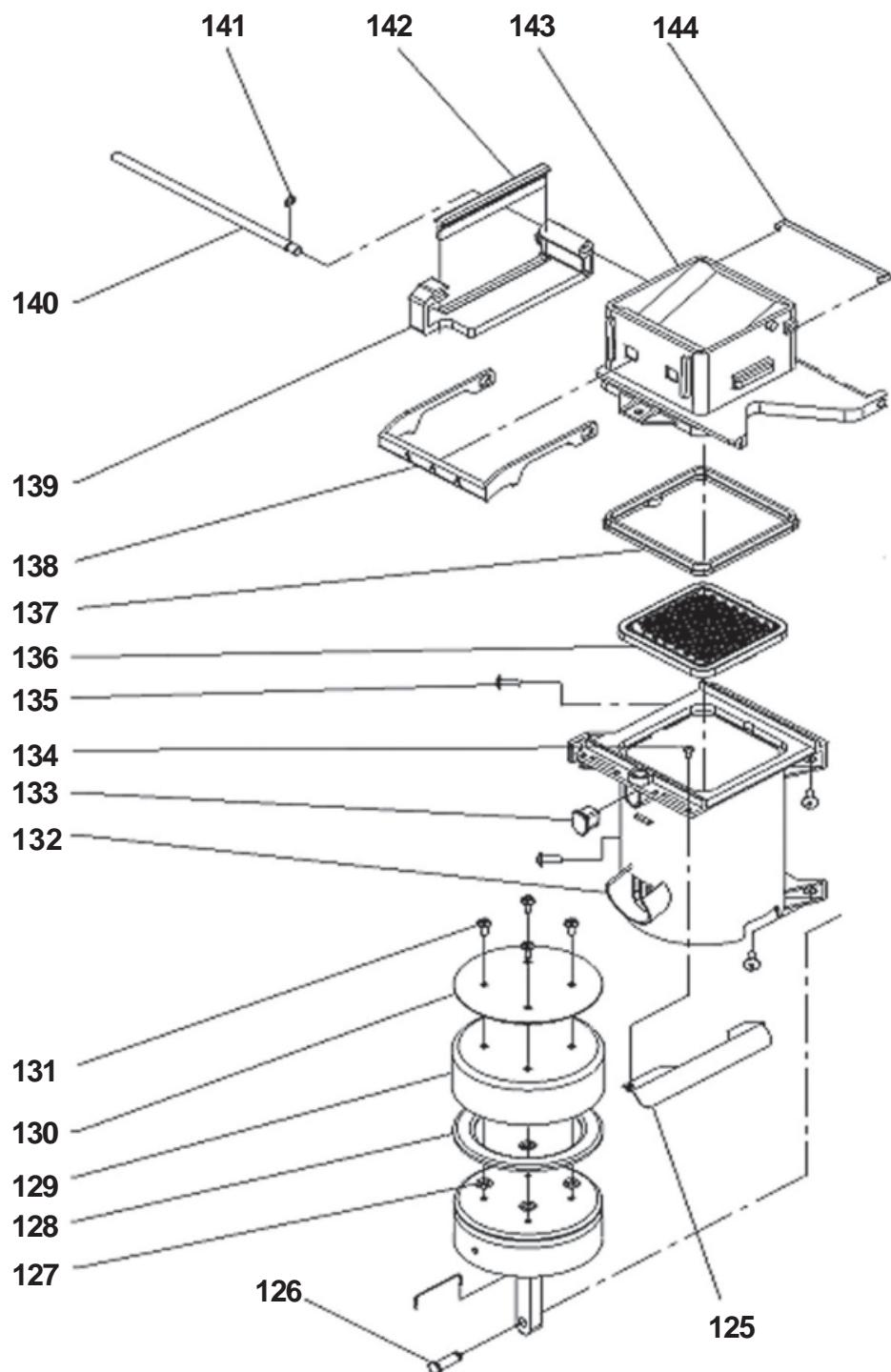


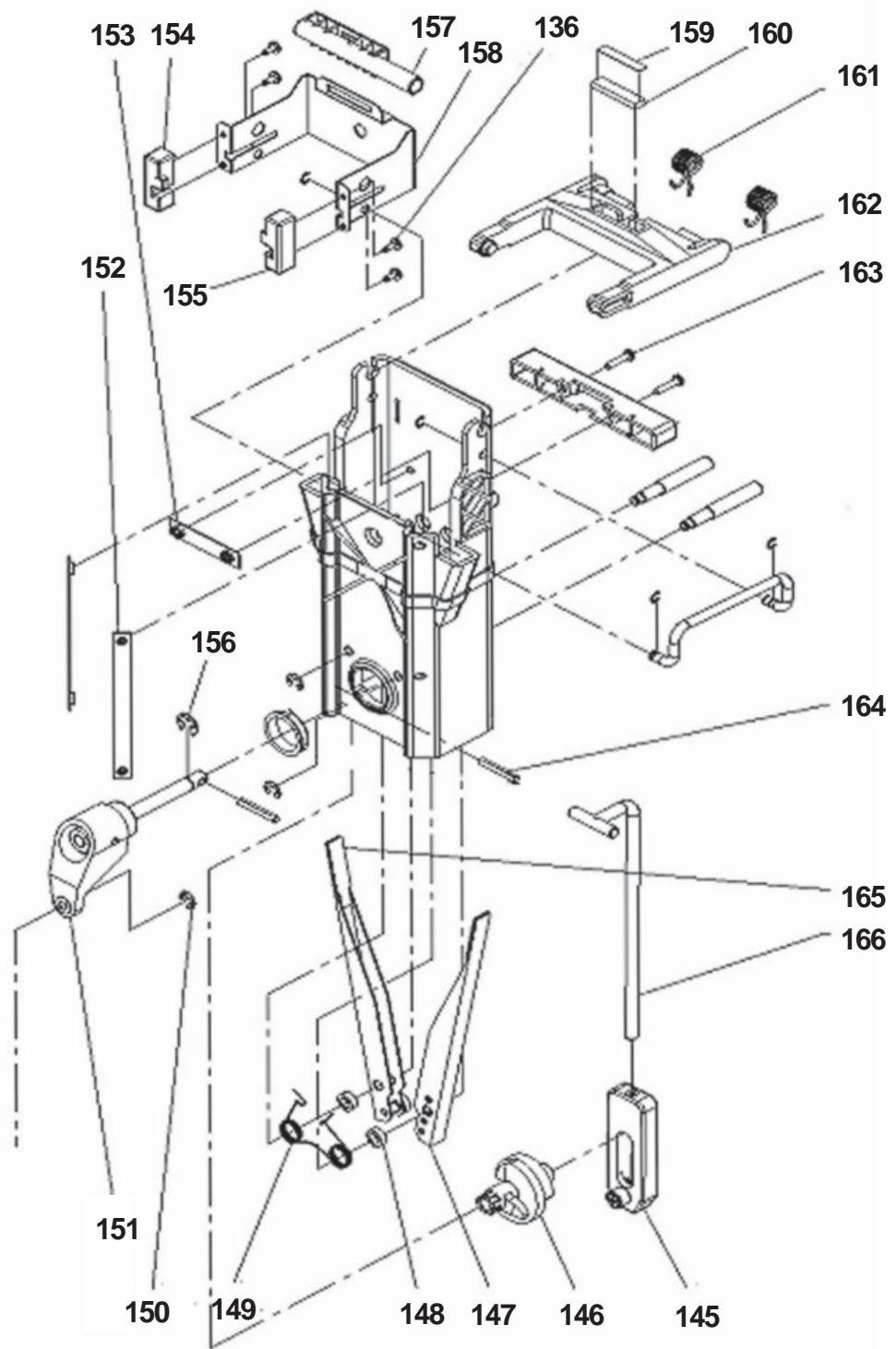
Pos. 31 Silicone hose sales by metre

## Brew mechanism.









# COFFEE QUEEN

## Residence



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Your retail dealer

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Art. nr/Art. no. 1704344